

2018 NASA Applied Sciences, Water Resources Science Team Meeting

June 26-28, 2018

Sustainability Energy and Environment Complex
University of Colorado Boulder

v. June 18, 2018

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[Please see the 2018 Water Resources Science Team Meeting Webpage for more information.](#)

Tuesday, June 26, 2018			
Time	Title	Speakers	Affiliation
2:00 PM	Registration		
2:15 PM	Welcome and Overview of NASA ASP Water Resources Program and WWAO	Brad Doorn / Indrani Graczyk	NASA HQ / JPL
2:35 PM	Project Update: The Western Land Data Assimilation System	Matthew Rodell	NASA GSFC
2:45 PM	Project Update: Fallowed Area Mapping	Forrest Melton	NASA ARC-CREST
2:55 PM	Project Update / New Activities: ASO and iSnohal	Tom Painter	NASA JPL
3:05 PM	New Project Overview: New Mexico Evapotranspiration	Gregory Halverson / Josh Fisher	NASA JPL
3:15 PM	New Project Overview: Navajo Drought Monitoring	Amber McCullum	NASA ARC-CREST
3:25 PM	New Project Overview: Irrigation Management with SIMS and CropManage	Alberto Guzman	NASA ARC-CREST
3:35 PM	New Project Overview: Higher Resolution Soil Moisture for USDA	Rajat Bindlish	NASA GSFC
3:45 PM	BREAK		
4:00 PM	Debrief from the Needs Assessment Workshop for the CO River Basin	Stephanie Granger	NASA JPL
4:50 PM	ADJOURN		
Wednesday, June 27, 2018			
Time	Title	Speakers	Affiliation
8:30 AM	Registration		
9:00 AM	Welcome from the University of Colorado Boulder	Noah Molotch, Terri Fiez	Univ. of CO, Boulder
9:15 AM	Welcome and Overview from the NASA Applied Sciences Program	Lawrence Friedl, Brad Doorn	NASA HQ
9:30 AM	Water Resource Applications with the Airborne Snow Observatory, MODIS, VIIRS, and iSnohal	Tom Painter	NASA JPL
9:40 AM	Red River of the North Snowmelt Flood Forecasting	Jennifer Jacobs	UNH
9:50 AM	Assessing Snow Water Resources in Mountain Ranges with Few Surface Measurements	Jeff Dozier	UCSB
10:00 AM	Advancing Water Supply Forecasts in the Colorado River Basin for Improved Decision Making	Jay Day	RTI International
10:10 AM	Analysis of Agricultural Water Supply-Demand Imbalance During the Unprecedented California Drought Using NASA Satellite Data	Noah Molotch	Univ. of CO, Boulder
10:20 AM	A Hybrid Statistical-Dynamical Drought Prediction Framework: Application to the Southwestern United States	Amir Aghakouchak	UCI
10:30 AM	Integrating GRACE and GRACE Follow-On Data into Flood and Drought Forecasts for the Continental U.S.	Matthew Rodell	NASA GSFC
10:40 AM	BREAK		
10:55 AM	VALUABLES and Water Resources Projects	Yusuke Kuwayama	RFF
11:05 AM	Impact Assessment Panel: Jennifer Jacobs, Matthew Rodell, Jay Day	Yusuke Kuwayama	NASA HQ
11:45 AM	Impact Assessment Discussion	Brad Doorn	NASA HQ
12:00 PM	LUNCH / Poster Session		
1:00 PM	Operational Remote Sensing of Agricultural Water Use in Cooperation with Western State Water Resources Agencies for Improved Water Management	Justin Huntington	Desert Research Institute
1:10 PM	Monitoring Vineyard Water Use and Vine Water Status with Land Surface Temperature for Improved and Sustainable Water Management from Field to Regional Scales	William Kustas	USDA ARS

1:20 PM	Improved Drought Monitoring with QuickDRI	Tsegaye Tadesse / Brian Wardlow	UNL
1:30 PM	Panel: Decadal Survey and Applied Sciences -- Highlights and Opportunities	Waleed Abdalati, Jeff Dozier, Venkat Lakshmi, John Bolten, Brad Doorn	
2:30 PM	BREAK		
2:50 PM	Decision Support System to Enhance Source Water Quality Monitoring and Modeling using Remote Sensing Data	Josh Weiss	Hazen and Sawyer
3:00 PM	Cyanobacteria Assessment Network	Blake Schaeffer	EPA
3:10 PM	Maximizing Utility of Remote Sensing Data for Water Quality Monitoring and Resources Management in California's Water Systems	Christine Lee	NASA JPL
3:20 PM	Developing a Dynamic SPARROW Water Quality Decision Support System	Richard Smith	USGS
3:30 PM	Water Resources Poster Session		
5:15 PM	CLOSE / ANNOUNCEMENTS	Brad Doorn	NASA HQ

Thursday, June 28, 2018

Time	Title	Speakers	
8:30 AM	Registration		
9:00 AM	Western Water Applications Office Update	Indrani Graczyk	WWAO
9:15 AM	Global Food Security Initiative Update	Stephanie Schollaert Uz	NASA GSFC
9:30 AM	Water Resources Partners Panel: S2S	Christine Lee	NASA JPL
10:15 AM	BREAK		
10:30 AM	Capacity Building Program Update	Kel Market	NASA MSFC
10:45 AM	GEOGLOWS Update	Brad Doorn	NOAA
11:00 AM	WR Team Discussion: Project Transition / Shared Cloud Platform for ASP	Forrest Melton	NASA ARC
11:30 AM	WR Team Discussion: Communications and Outreach	Pamela Bond	Chief
12:00 PM	LUNCH / Poster Session		
1:00 PM	ERS, ARLs, ASP Water Resources Website, Project One-Pagers	Forrest Melton / Sarah Brennan	NASA ARC / NASA HQ
1:15 PM	Enhancing the USDA Global Crop Production Decision Support System with NASA Soil Moisture Active Passive (SMAP) Satellite Observations	John Bolten	NASA GSFC
1:25 PM	Forecasts for Africa and the Middle East (FAME)	Christa Peters-Lidard	NASA GSFC
1:35 PM	Optimizing Reservoir Operations for Hydropower Production in Africa through the Use of Remote Sensing Data and Seasonal Climate Forecasts	Mekonnen Gebremichael	UCLA
1:45 PM	Towards Operational Water Resources Management in South Asia Exploiting Satellite Geodetic and Remote Sensing Technologies	Faisal Hossain	UW
1:55 PM	NASA Earth Observations for the Food Security and Agriculture Consortium	Alyssa Whitcraft / Brian Barker	UMD
2:05 PM	Eco-hydrological Modeling Using Field-based and Earth Observations to Assess Water Use Efficiency and Support Agricultural Water Resources Management	Jean Claude Roger	UMD
2:15 PM	Development of a Global Evaporative Stress Index Based on Thermal and Microwave LST towards Improved Monitoring of Agricultural Drought	Chris Hain	NASA MSFC
2:25 PM	The Global Reservoir and Lake Monitor (G-REALM): Sustained Water Level Monitoring for Agriculture, Regional Security, and Inland Fisheries	Charon Birkett	UMD
2:35 PM	BREAK		
3:05 PM	An AmeriGEOSS Cloud-based Platform for Rapid Deployment of GEOGLOWS Water and Food Security Nexus Decision Support Apps	Daniel Ames	BYU
3:15 PM	Evaluation of Risk and Capacity Development for Two Indian River Basins	Venkat Lakshmi	Univ. of South Carolina
3:25 PM	Monitoring Surface Water Storage Changes over the Lower Mekong with Multiple Satellite Techniques towards Sustainable Water Management	Chi-Hung Chang / Hyongki Lee	Univ. of Houston
3:35 PM	Optimizing the Indus Basin Irrigation System and Reservoir Operations using Remotely Sensed Snow Surface Properties in the ParBal model	Karl Rittger	Univ. of Colorado
3:45 PM	Workshop Wrap-Up and Closing Remarks	Brad Doorn	NASA HQ
3:55 PM	Update ERS, Website Content, ARLs, Project 1-pagers (PM + Associates Available)	All	
5:00 PM	ADJOURN		